11. Rufus

Program Name: Rufus.java Input File: rufus.dat

You are the new TA for professor Rufus, and she needs you to grade some of her spelling quizzes. For each quiz, you need to find the average score. You will grade by the following criteria:

- Each quiz score will be calculated by finding the least number of "edits" it takes to turn the student's answer into the correct answer. The types of "edits" are as follows:
 - o Insert Insert a new character into the student's answer.
 - O Delete Delete a character from the student's answer.
 - o Replace Replace a character in the student's answer with another character.
- The score for each quiz will be equal to (the length of the correct answer) (the number of "edits" to turn the student's answer into the correct answer).
- There can be negative scores.
- Ignore case when calculating scores.

Input: The input will begin with two integers, s, q (0 < s, q <= 1000), denoting the number of students who took all of the quizzes, and the number of quizzes to be graded, respectively. There will be q cases, and each case will begin with a word, on its own line, denoting the correct answer for that quiz. The following s lines will each contain a student's answer to be graded.

Output: Output the average score for each quiz, the average score should then be printed in format: "[Correct Answer] Quiz Average: [Average Score]", where [Correct Answer] is replaced with the given correct answer, and [Average Score] is replaced with the average score on the quiz, rounded to 2 decimal places.

Sample input:

3 2
Business
Bizness
Busyness
Bussness
Economics
Ecanomix
Ecenahmecs
Economics

Sample output:

Business Quiz Average: 6.33 Economics Quiz Average: 6.67